

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A high-pressure mercury vapor discharge lamp comprising a lamp vessel made of a transparent ceramic material, enclosing a discharge space comprising an ionizable discharge medium and at least two electrodes having electrode tips that are spaced apart at a mutual distance d , and electrical feed-through elements which extend from the at least two electrodes to an exterior of the lamp, wherein the distance d between the electrode tips is less than 1.0 mm and a mercury density in the lamp vessel is higher than 0.3 mg/mm^3 .

2. (Previously Presented) The lamp as claimed in claim 1, wherein the distance between the electrode tips ranges from 0.3 to 0.8 mm.

3. (Previously Presented) The lamp as claimed in claim 1,
wherein the distance between the electrode tips ranges from 0.3 to
0.6 mm.

4. (Previously Presented) The lamp as claimed in claim 1,
wherein the mercury density in the lamp vessel ranges from 0.3 to
0.8 mg/mm³.

5. (Previously Presented) The lamp as claimed in claim 1,
wherein the mercury density in the lamp vessel range from 0.4 to
0.7 mg/mm³.

6. (Previously Presented) The lamp as claimed in claim 1,
wherein the lamp vessel comprises a bulging section communicating
with at least two feed-through channels having an inner diameter
smaller than the bulging section.

7. (Previously Presented) The lamp as claimed in claim 6,
wherein the bulging section is substantially cylindrical over the

distance d and has an internal cross-sectional diameter Di ranging from 1.5 to 4.5 mm and a length L ranging from 4 to 8 mm.

8. (Previously Presented) The lamp as claimed in claim 6, wherein a wall load inside of the lamp vessel during operation ranges from 40 to 150 W/cm².

9. (Previously Presented) The lamp as claimed in claim 1, wherein the ceramic material is chosen from the group consisting of sub-micro polycrystalline aluminum (PCA), yttrium aluminum garnet (YAG), Y₂O₃, MgAl₂O₄, and aluminum nitride (AIN).

10. (Previously Presented) A lighting apparatus, comprising a main body and at least the lamp of claim 1.

Claims 11-20 (Canceled)